U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 4041K-000100/DVA First Inventor Takahide Ohara Cooling Apparatus Boiling And Condensing Refrigerant With A Title Refrigerant Vapor Passage Having A Larger Cross Sectional Area

Express Mail Label No. EV 406 074 444 US (02/06/2004) (Only for new nonprovisional applications under 37 C.F.R. 1.53(b)) Mail Stop Patent Application APPLICATION ELEMENTS Commissioner for Patents ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria, VA 22313-1450 1. 🔯 Fee Transmittal Form (e.g., PTO/SB/17) 7. CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) 2. 8. Nucleotide and/or Amino Acid Sequence Submission Applicant claims small entity status. See 37 CFR 1.27. (if applicable, all necessary) з. 🖂 Specification [Total Pages a. Computer Readable Form (CRF) (preferred arrangement set forth below) b. Specification Sequence Listing on: Descriptive title of the Invention i. CD-ROM or CD-R (2 copies); or Specification - Cross References to Related Applications filed in English ii. 🔲 paper - Statement Regarding Fed sponsored R & D c. Statements verifying identity of above copies - Reference to sequence listing, a table, or a computer program listing appendix **ACCOMPANYING APPLICATIONS PARTS** - Background of the Invention - Brief Summary of the Invention 9. Assignment Papers (cover sheet & document(s)) - Brief Description of the Drawings (if filed) 10. 37 C.F.R.§3.73(b) Statement Power of - Detailed Description (when there is an assignee) Attorney - Claim(s) - Abstract of the Disclosure 11. English Translation Document (if applicable) 4. 🔯 Drawing(s) (35 U.S.C.113) [Total Sheets 7 12. 🛛 Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations 5. Oath or Declaration [Total Pages | 3 13. 🛛 Preliminary Amendment a. Newly executed (original or copy) 14. 🛛 Return Receipt Postcard (MPEP 503) b. Copy from a prior application (37 CFR 1.63 (d)) (Should be specifically itemized) (for a continuation/divisional with Box 18 completed) Certified Copy of Priority Document(s) 15. 🔲 i. DELETION OF INVENTOR(S) (if foreign priority is claimed) Signed statement attached deleting inventor(s) 16. 🔲 Request and Non Publication under 35 U.S.C. 122 named in the prior application, see 37 CFR (b)(2)(B)(i). Applicant must attach form PTO/SB/35 1.63(d)(2) and 1.33(b). or its equivalent. 6. Application Data Sheet. See 37 CFR 1.76 17. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: ☐ Continuation □ Divisional ☐ Continuation-in-part (CIP) of prior application No: 10 / 279,164 Prior application information: Examiner Christopher M. Atkinson Group / Art Unit: 3753 For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts. 17. CORRESPONDENCE ADDRESS Correspondence address below □ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) Harness, Dickey & Pierce, P.L.C. Name P.O. Box 828 Address City Bloomfield Hills MI 48303 State Zip Code Country United States of America Telephone 248-641-1600 Fax 248-641-0270 Name (Print/Type) Michael J. Schmidt Registration No. (Attorney/Agent) 34,007 Signature Date February 6, 2004

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FI	EE	TR	AN	SMI	T	ΓAL
		for	FY	200	4	

Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)	770

Complete if Known					
Application Number	To Be Assigned				
Filing Date	Herewith				
First Named Inventor	Takahide Ohara				
Examiner Name	Christopher M. Atkinson				
Art Unit	3753				
Attorney Docket No.	4041K-000100/DVA				

METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)					
Michaelt II Credit and II Marry II Other II :				3. ADDITIONAL FEES					
☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None Order ☐ Deposit Account:				Large	Entity	Small I	Entity		
Deposit				Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account 08-0750			1051	130	2051	65	Surcharge - late filing fee or oath		
Number 1				1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
Account Harness, Dickey & Pierce, P.L.C.			1053	130	1053	130	Non-English specification		
			1812	2,520	1812	2,520	For filing a request for reexamination		
Name The Director is authorized to: (check all that apply)					920*	1804	920*	Requesting publication of SIR prior to Examiner action	
☐ Charge fee(s) indicated below ☒ Credit any overpayments ☒ Charge any additional fee(s) during the pendency of this application					1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
☐ Charge fee(s)	indicated belo	w, except for the fi	ling fee	1251	110	2251	55	Extension for reply within first month	
to the above-ident		CALCULATION		1252	420	2252	210	Extension for reply within second month	
1. BASIC FIL	ING FEE			1253	950	2253	475	Extension for reply within third month	
Large Entity	Small Entity	Fac Dagarintian		1254	1,480	2254	740	Extension for reply within fourth month	
	Fee Fee Code (\$)	Fee Description	Fee Paid	1255	2,010	2255	1,005	Extension for reply within fifth month	
	2001 385	Utility filing fee	770	1401	330	2401	165	Notice of Appeal	
1002 340 2	2002 170	Design filing fee		1402	330	2402	165	Filing a brief in support of an appeal	
1003 530 2	2003 265	Plant filing fee		1403	290	2403	145	Request for oral hearing	
	2004 385 2005 80	Reissue filing fee	_	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1005 160 1	2005 80	Provisional filling fe	e	1452	110	2452	55	Petition to revive – unavoidable	
SUBTOTAL (1) (\$) 770					1,330	2453	665	Petition to revive - unintentional	
				1501	1,330	2501	665	Utility issue fee (or reissue)	
2. EXTRA CLAIN	1 FEES	F.4 F.		1502	480	2502	240	Design issue fee	
			from Fee	1503	640	2503	320	Plant issue fee	
Total Claims 4 -20 ** = 0 X 18 = 0			1460	130	1460	130	Petitions to the Commissioner		
Independent	-			1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)) [
Claims 1	-3 ** =	= 0 X 86	= 0	1806	180	1806	180	Submission of Information Disclosure Stmt	
Multiple Dependent Large Entity Small Entity				8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
Fee Fee Code (\$)		Fee Description 5)	<u>on</u>	1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1202 18	2202 9	Claims in exce	ss of 20	1810	770	2810	385	For each additional invention to be	
1201 86	2201 4	Independent c	aims in excess of 3					examined (37 CFR § 1.129(b))	
1203 290	2203 1	145 Multiple depen	dent claim, if not paid	1801	770	2801	385	Request for Continued Examination (RCE)	, [
1204 86	2204 4	3 ** Reissue inde original patent	ependent claims over	1802	900	1802	900	Request for expedited examination	<u> </u>
1205 18	2205 9	** Reissue clai over original pa	ms in excess of 20 and atent	of a design application					
SUBTOTAL (2) (\$) 0					Other fee (specify)				
				*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0					
**or number previously paid, if greater; For Reissues, see above									

SUBMITTED BY			C	Complete (if applicable)		
Name (Print/Type)	Michael J. Schmidt	Registration No. Attorney/Agent) 34,007	Telephone	(248) 641-1600		
Signature	/k	and had	Date	February 6, 2004		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.